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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

ALBERTALLI, BRIAN LOUIS

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,647

Applicant(s)

ROSS ET AL

Examiner

Brian L. Albertalli

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendments to the claims have been entered. Claims 1, 7, 13, 19, and 20 are currently amended and new claim 21 has been added.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 7, 13, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection.

3. However, the additional requirements of "a text input device" and "a visual output device" in currently amended independent claims 1, 7, and 19, have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In this case, the bodies of claims 1, 7, and 19 do not describe any use or structural limitation of the recited "text input device" or "visual output device". Rather, the bodies of claims 1, 7, and 19 only require "spoken input from the user" through the "audio input device" and "audible rendering of the responses" through the "audio output device".

4. Regarding the rejections of claims 13-18 and 20 under 35 U.S.C. 101 fail to define patentable subject matter.

Firstly, it should be made clear that “signals” *per se* are not eligible subject matter under 35 U.S.C. 101. The Applicant has defined a propagated signal product in the specification (see page 7) as a computer program embodied on a propagated signal, such as a radio wave, electrical wave, etc. Therefore, the claimed “computer program propagated signal product” of claim 20 is not patentable under 35 U.S.C. 101. A claim reciting a signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter under 35 U.S.C. 101 (i.e. process, machine, manufacture, or composition of matter). A signal, as a form of energy, is not a tangible physical article or object.

Therefore, the addition of “*tangible* computer usable propagated signal product” as used in claim 20 is perplexing because a propagated signal product, by definition, is a form of energy and thus not tangible. While the Applicant has added the term “tangible” to claim 20 in an attempt to define a tangible physical article or object, this conflicts with the recitation of a “propagated signal product”.

Given this conflict, the term “tangible” as used in the context of this application does not seem to hold the standard definition, i.e. a concrete, physical object. Therefore, the recitation of “tangible computer usable program product” in claim 13 does not define patentable subject matter because “tangible” does not necessarily render the computer usable program product a physical object. This is further highlighted by the fact that the Applicant has explicitly described in the specification (page 7) the computer

program product as a propagation medium, which, as explained above, is not patentable subject matter.

Therefore, the rejections made under 35 U.S.C. 101 are maintained.

For further information regarding the Office's current policy regarding 35 U.S.C. 101, please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility".

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 13-18 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. See explanation above under Response to Arguments.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 21 recites the limitation "the domain model" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-21 rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (U.S. Patent 6,505,162).

In regard to claims 1, 7, 13, 19, and 20, Wang et al. disclose an interface, method, system and computer program product comprising:

a prioritized queue for retaining responses generated by a computer in response to spoken input from the user asynchronously received by the computer through the audio input device (Fig. 6, dialog manager 600 includes stack 609 which retains dialog states for later use, column 6, lines 54-61; based on a response action indicated by the user, column 8, lines 32-43; the user inputs actions through speech, Fig. 1, column 1, lines 21-26; the user enters information corresponding to a plurality of dialog states before the computer responds, therefore the spoken input is “asynchronous”, column 9, lines 23-47), the spoken input being interpreted by a reasoning facility which enables the spoken input to include questions by the user (user input U2, column 9, line 60 to column 10, line 2), the computer running multiple applications (Fig. 2, application domains, lines 57-65) and the reasoning facility interpreting the spoken input in a

manner that at least one of the applications recognizes the interpreted spoken input (the dialog managers interprets semantic input according to the application domains' external knowledge bases, column 5, lines 1-6);

a dialog manager for placing the generated responses in the prioritized queue (Fig. 6, action execution module 604 pushes responses onto stack 609, column 8, lines 32-43); and

a turn manager for managing audible rendering of the responses from the prioritized queue through the audio output device (Fig. 6, dialog manager 600 output semantic representations; which are rendered by a speech synthesis module, Fig. 1, 105, column 1, lines 33-40), the turn manager prioritizing audible rendering of the responses according to rules other than the order in which the responses are added to the prioritized queue (the stack 609 is searched for previous dialog states throughout the entire stack and the previous dialog states are returned, column 9, line 65 to column 10, line 12) and according to corresponding contexts in a context priority queue (state history 608 retains a history of the dialog as context for selecting an appropriate response, column 8, lines 9-13) so that the user receives each response as a part of an asynchronous dialog between the computer and the user (the user enters information corresponding to a plurality of dialog states before the computer responds, therefore the spoken input is "asynchronous", column 9, lines 23-47), the turn manager conducting the dialog in a polite manner that is subject to control by the user including allowing the user to change subjects (the computer response apologizes when a request cannot be met, therefore the dialog is "polite", column 9, lines 60-64; the user's input changes the

goal of the system state, therefore user's input serves to "change subjects", column 9, line 65 to column 10, line 2).

In regard to claim 2, 8, and 14, Wang et al. disclose:

providing speech output including audible renditions of the responses when spoken to by the user (such as answering the user's question, column 9, lines 1-5; the user's input being spoken and the computer's output being audibly rendered, Fig. 1, column 1, lines 27-40);

asking permission of the user before providing speech output based on delayed answers and notifications (the computer asks for the user's permission in dialog state S2-2, column 10, lines 32-33; previously stored answers and notifications from the stack are then popped, column 10, lines 34-52; to provide the delayed answer of dialog state S3-1, column 10, lines 53-56); and

allowing the user to change subject (the user's input changes the goal of the system state, therefore user's input serves to "change subjects", column 9, line 65 to column 10, line 2).

In regard to claims 3, 4, 9, 10, 15, and 16, Wang et al. disclose:

the turn manager provides the audible rendering of responses in a delivery mode subject to control by the user wherein the delivery mode is one of an immediate delivery mode and a delayed delivery mode (each dialog state has a priority of either immediate delivery, i.e. highest priority, or delayed delivery, i.e. not highest priority, wherein the

user's selection of providing information that does not correspond to a system prompt will change the priority of a given dialog state, column 7, line 57 to column 8, line 13).

In regard to claims 5, 11, and 17, Wang et al. disclose the turn manager manages the audible rendering of the responses based on dialog states that specify the current state of the dialog between the computer and the user (Fig. 4, dialog states, column 5, lines 45-53).

In regard to claims 6, 12, and 18, Wang et al. disclose the response is an announcement of an event of interest to the user as determined by the computer (such as the itinerary for the user, column 10, lines 48-56).

In regard to claim 21, Wang et al. disclose a domain model that includes application specific knowledge in an application domain model for external applications (Fig. 2, column 4, lines 57-65).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 4/10/06



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600